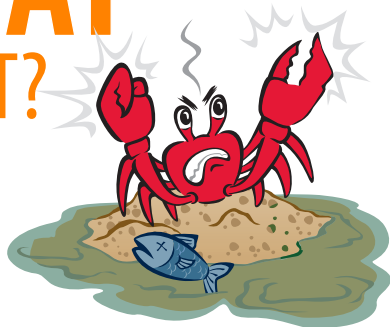


BLUE-GREEN ALGAE

What is it? What causes it? What can you do?

Blue-green algae, a naturally occurring aquatic bacteria, contain chlorophyll and depend on sunlight to grow, like plants. Found throughout the world, these algae multiply quickly in water bodies with high nutrient levels.

WHAT IS IT?



WHAT CAUSES IT?

Warm temperatures and calm water conditions – common in South Florida during summer and early fall – often contribute to algae blooms.

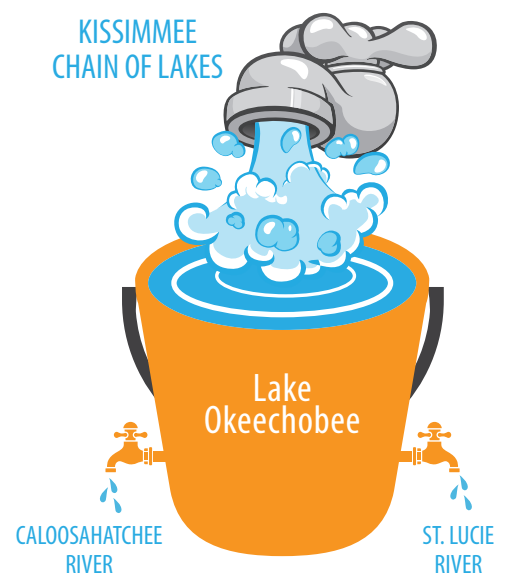
Blue-green algae blooms in Lake Okeechobee are strongly associated with higher lake stages. When the lake level rises too high and creates potential for a breach in the dike, the U.S. Army Corps of Engineers conducts discharges into coastal estuaries to avoid loss of life from flooding.

Nutrients and fresh water that can fuel growth of blue-green algae also come from stormwater runoff and local septic tanks.

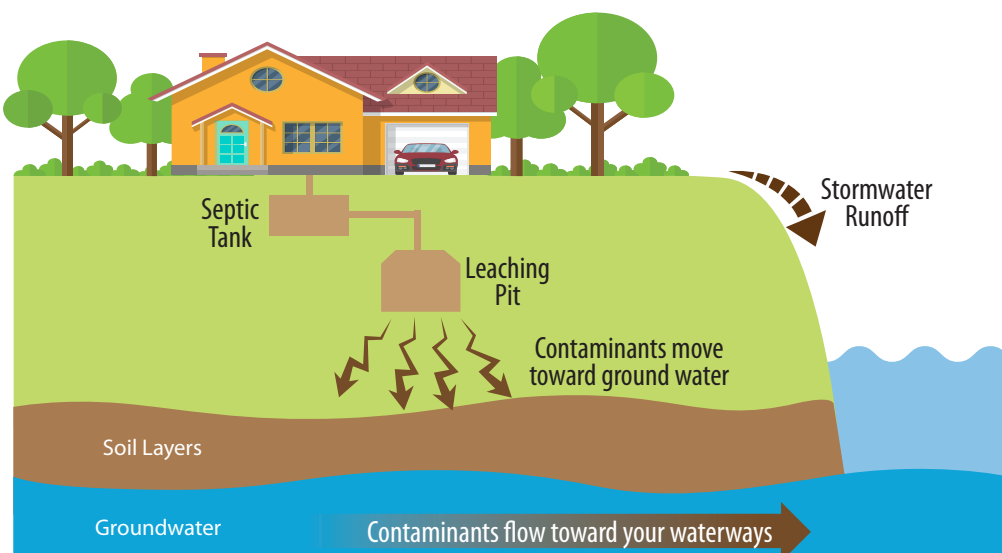
LAKE OKEECHOBEE MANAGING THE WATER LEVELS

Lake Okeechobee is a shallow lake with an average depth of only 9 feet. When water conditions are calm and the weather is warm, massive algae blooms can and do occur. Development in central Florida over the years required drainage and flood control. Water now flows from the Kissimmee Chain of Lakes and down the Kissimmee River much faster than nature intended. The water stacks up against the dike – an earthen berm built in the 1930s for flood control, not for water storage.

KISSIMMEE
CHAIN OF LAKES



With the current flood control system in place, when lake levels rise, water must be sent into coastal estuaries until the federal government funds the necessary repairs to the dike to be able to hold more water in the lake and manage it properly.



Septic Tank vs. Public System

Septic tanks that do not operate properly can leach into the soil and contaminate groundwater which contribute to excess nutrients in the runoff entering area waterway. If you home has a septic tank, have it serviced regularly. The best option is to have your home hooked up to a public sewer system.

Sunlight

HEALTHY

UNHEALTHY

Minimal phosphorus and nitrogen input

Algae

Oxygen

Oxygen

In a healthy environment, sunlight penetrates the water and promotes growth of healthy aquatic plants that produce oxygen. Fish thrive.

In an unhealthy environment, sunlight is blocked by algae that is producing excessive amounts of phosphorus and nitrogen.

Dead, decomposing algae kills oxygen producing plants. Fish die.

WHAT CAN YOU DO?

You can support legislation to provide more water storage both north and south of Lake Okeechobee, as well as more water storage in the Caloosahatchee and St. Lucie basins. Water storage to the north will help slow the flow into the lake and also allow natural vegetation to clean the water before it enters the lake. You can also support legislation to encourage expedited completion of the Herbert Hoover Dike rehabilitation to allow for higher water levels to curtail discharges into the coastal estuaries.



FERTILIZE RESPONSIBLY

Excessive nutrients flowing into our waterways do not only come from big industry or agriculture. The use of fertilizer and pesticides on our yards results in pollutants contaminating the waterways in stormwater runoff when it rains. Residents are encouraged not to use fertilizers or pesticides during the warmer months and to use them in the correct amounts during other times of the year.



WHAT WE DO for algae blooms

State agencies work together to respond to blue-green algal blooms. Roles include:

- DEP: Deploys staff to collect samples and conducts testing www.dep.state.fl.us
- SFWMD: Collects samples and reports blooms observed during routine water quality sampling www.sfwmd.gov
- DOH: Issues health advisories and posts warning signs when there is a health risk www.floridahealth.gov
- FWC: Investigates impacts to fish and wildlife www.myfwc.com



PLANT FLORIDA-FRIENDLY LAWNS

Plant native or drought-tolerant vegetation that thrives in the native soil and local weather conditions. Go native, and resist the urge to water it and just let it go brown during the dry season. It will come back, as nature intended, when the rains come.

